CLAIM AMENDMENTS

1-16 (Previously Cancelled)

17. (Currently Amended) A flotation cell including a structure defining an outlet opening for discharging concentrate from the flotation cell, the outlet opening having a horizontal dimension ~~transverse to the direction of flow of concentrate through the outlet opening~~ and a vertical dimension, and the flotation cell also including a flow measuring arrangement for measuring concentrate flow through the outlet opening, the flow measuring arrangement comprising:

an elongate sensor element mounted relative to said structure in a manner that allows movement of the sensor element relative to said structure under the influence of flow of concentrate through the outlet opening, the sensor element having a length dimension sufficient that the sensor element extends over substantially the entire ~~transverse~~ vertical dimension of the outlet opening and having a width dimension that is parallel to the horizontal dimension of the outlet opening and is substantially less than the ~~length~~ horizontal dimension of the ~~sensor element~~ outlet opening, and

a measuring device for detecting the position of the sensor element.

18. (Previously Added) A flotation cell according to claim 17, wherein the measuring device is an angle transmitter.

19. (Previously Added) A flotation cell according to claim 17, wherein the sensor element is mounted to said structure in a manner allowing angular movement of the sensor element relative to said structure and the measuring device is an angle transmitter.

20. (Previously Added) A flotation cell according to claim 17, wherein the flow measuring arrangement includes a horizontal shaft that is pivotally mounted to said structure and the sensor element is attached to the horizontal shaft.

21. (Previously Added) A flotation cell according to claim 17, wherein the flow measuring arrangement includes a horizontal shaft that is mounted to said structure and the sensor element is attached to the horizontal shaft.

22. (Previously Added) A flotation cell according to claim 17, wherein the flow measuring arrangement includes a horizontal shaft that is pivotally mounted to said structure above the outlet opening, the sensor element is attached to the horizontal shaft and extends downwards therefrom, and the measuring device is an angle transmitter.

23. (Previously Added) A flotation cell according to claim 17, wherein the flow measuring arrangement includes a horizontal shaft that is mounted to said structure and extends transversely of the flow direction of concentrate through the outlet opening.

24. (Previously Added) A flotation cell according to claim 17, including a control system and wherein the flow measuring arrangement is connected to the control system.

25. (Previously Added) A flotation cell according to claim 17, wherein the flow measuring arrangement includes a display unit.

26. (Previously Added) A flotation cell according to claim 17, wherein said structure is a drain chute.

27. (Previously Added) A flotation cell according to claim 26, wherein the flotation cell also includes a collecting pipe into which the concentrate from the drain chute is discharged, and the sensor element is disposed at least partly in the collecting pipe.

28. (Previously Added) A flotation cell according to claim 17, wherein the flow measuring arrangement includes a calibration means.

29. (Previously Added) A flotation cell according to claim 28, wherein the calibration means includes a movable weight element attached to the sensor element.

30. (Currently Amended) A flotation cell ~~according to claim 17,~~ including a structure defining an outlet opening for discharging concentrate from the flotation cell, the outlet opening having first and second mutually perpendicular dimensions transverse to the direction of flow of concentrate through the outlet opening, and the flotation cell also including a flow measuring arrangement for

measuring concentrate flow through the outlet opening, the flow measuring arrangement comprising:

an elongate sensor element mounted relative to said structure in a manner that allows movement of the sensor element relative to said structure under the influence of flow of concentrate through the outlet opening, the sensor element having a length dimension sufficient that the sensor element extends over substantially the entire first transverse dimension of the outlet opening and having a width dimension that is parallel to the second transverse dimension of the outlet opening and is substantially less than the length dimension of the sensor element, and

a measuring device for detecting the position of the sensor element,

and wherein the flow measuring arrangement includes a horizontal shaft that is pivotally mounted to said structure above the outlet opening, the sensor element is a rod that is attached to the horizontal shaft and extends downwards therefrom, and the measuring device is an angle transmitter for measuring deflection of the sensor element.

31. (New) A flotation cell according to claim 30, including a control system and wherein the flow measuring arrangement is connected to the control system.

32. (New) A flotation cell according to claim 30, wherein the flow measuring arrangement includes a display unit.

33. (New) A flotation cell according to claim 30, wherein said structure is a drain chute.

34. (New) A flotation cell according to claim 33, wherein the flotation cell also includes a collecting pipe into which the concentrate from the drain chute is discharged, and the sensor element is disposed at least partly in the collecting pipe.

35. (New) A flotation cell according to claim 30, wherein the flow measuring arrangement includes a calibration means.

36. (New) A flotation cell according to claim 35, wherein the calibration means includes a movable weight element attached to the sensor element.

37. (New) A flotation cell including a structure defining an outlet opening for discharging concentrate from the flotation cell, the outlet opening having a vertical dimension and a horizontal dimension, and the flotation cell also including a flow measuring arrangement for measuring concentrate flow through the outlet opening, the flow measuring arrangement comprising:

an elongate sensor element mounted relative to said structure in a manner that allows movement of the sensor element relative to said structure under the influence of flow of concentrate through the outlet opening, the sensor element being a rod having a length dimension sufficient that the sensor element extends over substantially the entire vertical dimension of the outlet opening and having a width dimension that is parallel to the horizontal dimension of the outlet opening and is substantially less than the horizontal dimension of the outlet opening, and

a measuring device for detecting the position of the sensor element.

38. (New) A flotation cell according to claim 37, wherein the measuring device is an angle transmitter.

39. (New) A flotation cell according to claim 37, wherein the sensor element is mounted to said structure in a manner allowing angular movement of the sensor element relative to said structure and the measuring device is an angle transmitter.

40. (New) A flotation cell according to claim 37, wherein the flow measuring arrangement includes a horizontal shaft that is pivotally mounted to said structure and the sensor element is attached to the horizontal shaft.

41. (New) A flotation cell according to claim 37, wherein the flow measuring arrangement includes a horizontal shaft that is mounted to said structure and the sensor element is attached to the horizontal shaft.

42. (New) A flotation cell according to claim 37, wherein the flow measuring arrangement includes a horizontal shaft that is pivotally mounted to said structure above the outlet opening, the sensor element is attached to the horizontal shaft and extends

downwards therefrom, and the measuring device is an angle transmitter.

43. (New) A flotation cell according to claim 37, wherein the flow measuring arrangement includes a horizontal shaft that is mounted to said structure and extends transversely of the flow direction of concentrate through the outlet opening.

44. (New) A flotation cell according to claim 37, including a control system and wherein the flow measuring arrangement is connected to the control system.

45. (New) A flotation cell according to claim 37, wherein the flow measuring arrangement includes a display unit.

46. (New) A flotation cell according to claim 37, wherein said structure is a drain chute.

47. (New) A flotation cell according to claim 26, wherein the flotation cell also includes a collecting pipe into which the concentrate from the drain chute is discharged, and the sensor element is disposed at least partly in the collecting pipe.

48. (New) A flotation cell according to claim 37, wherein the flow measuring arrangement includes a calibration means.

49. (New) A flotation cell according to claim 28, wherein the calibration means includes a movable weight element attached to the sensor element.